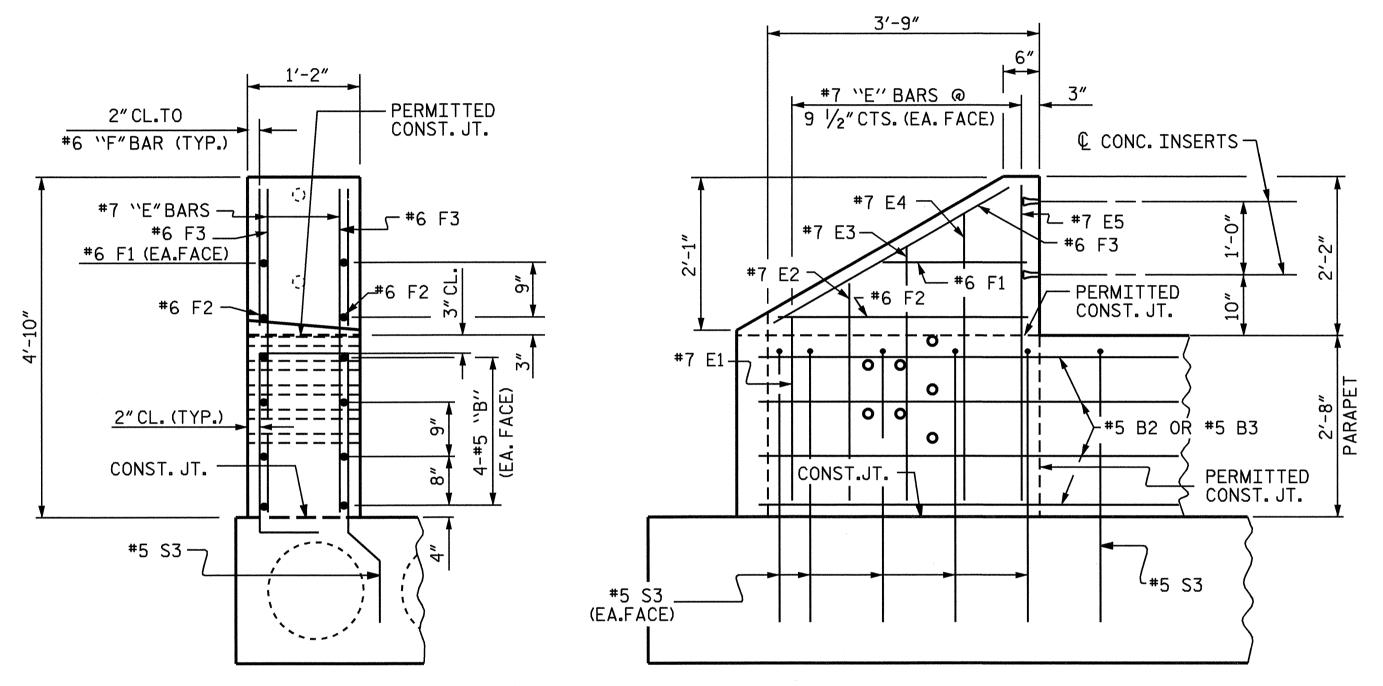


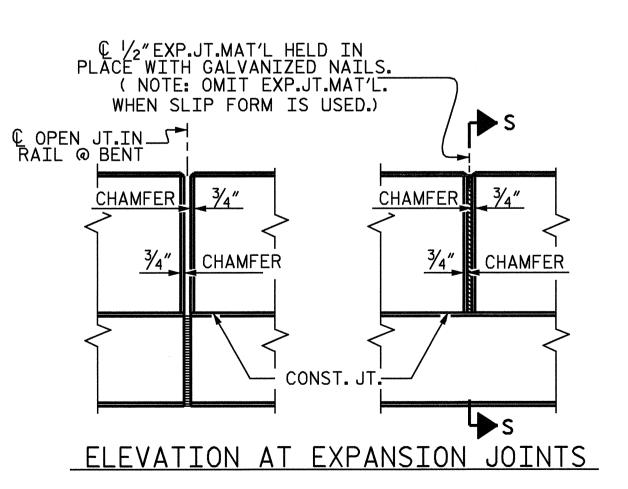
PLAN OF END POST

ELEVATION



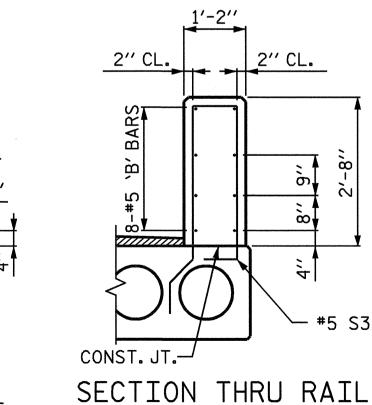
## PARAPET AND END POST FOR TWO BAR RAIL

FOR PLACEMENT OF B2 AND B3 BARS, SEE "PLAN OF SPAN" SHEETS



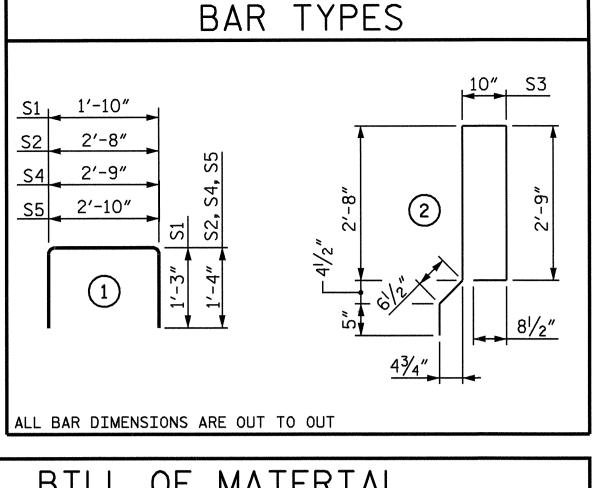
END VIEW

SECTION S-S AT DAM IN OPEN JOINT (THIS IS TO BE USED ONLY WHEN SLIP FORM IS USED )



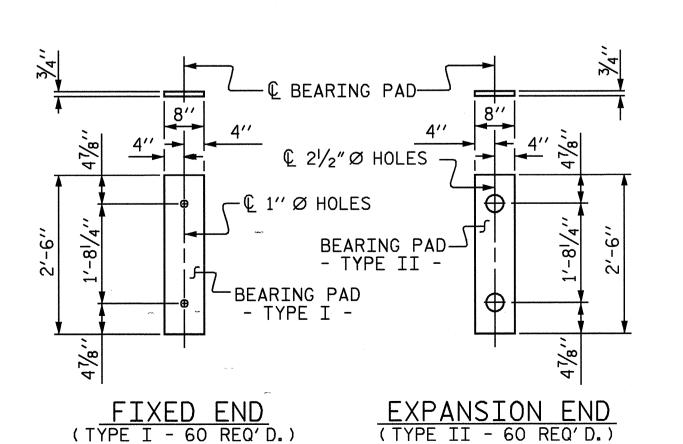
PARAPET DETAILS

DRAWN BY: William F. Parker DATE: 04/22/02
CHECKED BY: J. KHARVA DATE: 9/19/02



BILL OF MATERIAL								
FOR ONE CORED SLAB UNIT								
				INTERIOR			EXTERIOR	
BAR	SIZE	TYPE	NO	LENGTH	WEIGHT	NO	LENGTH	WEIGHT
B1	4	STR	4	26′-5″	71	4	26′-5″	71
S1	4	1	8	4'-4"	23	8	4'-4"	23
S2	4	1	96	5'-4"	342	96	5'-4"	342
* <b>*</b> S3	5	2				53	8'-0"	442
S4	4	1	4	5′-5″	14	4	5′-5″	14
S5	4	1	4	5′-6″	15	4	5′-6″	15
REINFORCING STEEL - LB.					465			465
* EPOXY COATED REINF. STEEL - LB.								442
5000 PSI CONCRETE - CU. YDS.					6.9			6.9
√2″Ø L.R. STRANDS - NO.					21			21

	BILL OF MATERIAL							
	FOR PARAPETS							
	AND END POSTS							
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT			
B2	80	5	STR	24'-8"	2058			
B3	80	5	STR	25'-0"	2086			
E1	8	7	STR	2′-8″	44			
E2	8	7	STR	3′-2″	52			
E3	8	7	STR	3′-8″	60			
E4	8	7	STR	4'-2"	68			
E5	8	7	STR	4'-6"	74			
F1	8	6	STR	1′-10″	22			
F2	8	6	STR	3′-0″	36			
F3	8	6	STR	3′-4″	40			
EPOXY	EPOXY COATED REINF. STEEL - LB.							
CLASS	CLASS AA CONCRETE - CU.FT.							
TOTAL	CONCRE	TE PARAPE	T - LIN.	FT.	505.46			



ELASTOMERIC BEARING DETAILS

## NOTES

ALL PRESTRESSING STRANDS SHALL BE 7-WIRE LOW RELAXATION GRADE 270 STRANDS AND SHALL CONFORM TO AASHTO M203 EXCEPT FOR SAMPLING REQUIREMENTS WHICH SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

ALL REINFORCING STEEL CAST WITH THE CORED SLAB SECTIONS SHALL BE GRADE 60 AND SHALL BE INCLUDED IN THE UNIT PRICE BID FOR PRESTRESSED CONCRETE CORED SLABS.

RECESSES FOR TRANSVERSE STRANDS SHALL BE GROUTED AFTER THE TENSIONING OF THE STRANDS.

THE 21/2" Ø DOWEL HOLES AT FIXED ENDS OF SLAB SECTIONS SHALL BE FILLED WITH GROUT. THE 21/2" Ø DOWEL HOLES AT EXPANSION ENDS OF SLAB SECTIONS SHALL BE FILLED WITH JOINT SEALER MATERIAL TO 11/2" ABOVE THE TOP OF DOWELS AND THEN FILLED WITH GROUT.

THE JOINT SEALER MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF TYPE B LOW MODULUS SILICONE SEALANT. THE 2"Ø BACKER ROD SHALL CONFORM TO THE REQUIREMENTS OF TYPE M BOND BREAKER. THE 12"WIDE BOND BREAKING TAPE SHALL BE CENTERED OVER THE JOINT AND CONFORM TO THE REQUIREMENTS OF TYPE N BOND BREAKER. SEE SECTION 1028 OF THE STANDARD SPECIFICATIONS.

WHEN CORED SLABS ARE CAST, A POSITIVE HOLD-DOWN SYSTEM SHALL BE EMPLOYED TO PREVENT VOIDS FROM RISING OR MOVING SIDEWAYS. THIS SYSTEM SHALL BE DESIGNED TO BE LEFT IN PLACE UNTIL THE CONCRETE HAS REACHED RELEASE STRENGTH. AT LEAST THREE WEEKS PRIOR TO CASTING CORED SLABS. THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR REVIEW AND COMMENT, DETAILED DRAWINGS OF THE PROPOSED HOLD-DOWN SYSTEM. IN ADDITION TO STRUCTURAL DETAILS, LOCATION AND SPACING OF THE HOLD-DOWNS SHALL BE INDICATED.

THE TRANSFER OF LOAD FROM THE ANCHORAGES TO THE CORED SLAB UNIT SHALL BE DONE WHEN THE CONCRETE HAS REACHED A COMPRESSIVE STRENGTH OF NOT LESS THAN 4000 PSI.

ALL REINFORCING STEEL IN PARAPETS SHALL BE EPOXY COATED.

PRESTRESSING STRANDS SHALL BE CUT FLUSH WITH THE CORED SLAB UNIT

APPLY EPOXY PROTECTIVE COATING TO CORED SLAB UNIT ENDS. FOR EPOXY PROTECTIVE COATING, SEE SPECIAL PROVISIONS.

VERTICAL GROOVED CONTRACTION JOINTS, 1/2" IN DEPTH, SHALL BE TOOLED IN ALL EXPOSED FACES OF THE PARAPET AND IN ACCORDANCE WITH ARTICLE 825-10(B) OF THE STANDARD SPECIFICATIONS. A JOINT SHALL BE LOCATED AT EACH THIRD POINT BETWEEN PARAPET EXPANSION JOINTS. ONLY ONE JOINT IS REQUIRED AT MIDPOINT OF PARAPET SEGMENTS LESS THAN 20 FEET IN LENGTH AND NO JOINTS ARE REQUIRED FOR THOSE SEGMENTS LESS THAN 10 FEET IN LENGTH

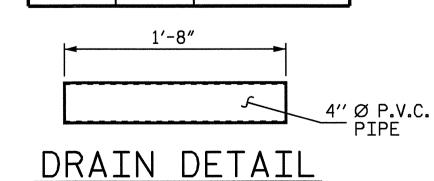
FOR ELASTOMERIC BEARINGS. SEE SPECIAL PROVISIONS.

DEAD LOAD DEFLECTION	AND	CAMBER
(TYP.SPANS A THRU E)		3'-0'' X 1'-9''
CAMBER (SLAB ALONE IN PLACE)	A	13/4"
DEEL FORTION DUE TO CUIDEDTMIDOCED DEAD LOAD	** ₩	5/_"
DEFLECTION DUE TO SUPERIMPOSED DEAD LOAD	* *	<sup>5</sup> /16″

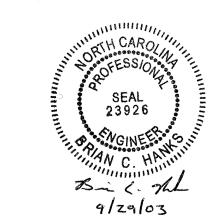
\*\* INCLUDES FUTURE WEARING SURFACE

CORED S	SLAB	S RE	QUIRED
UNIT TYPE	NUMBER	LENGTH	TOTAL LENGTH
INTERIOR	50	50′-5″	2520′-10″
EXTERIOR	10	50′-5″	504′-2″
TOTAL NUMBER	60	50′-5″	3025′-0″

SPL:	ICE CHA	LENGTH RT
BAR	SIZE	SPLICE LENGTH
B1	4	2'-9"



(40 REQUIRED)



GRADE 270 S	TRANDS
	<sup>1</sup> /₂″Ø L.R.
AREA (SQUARE INCHES)	0.153
ULTIMATE STRENGTH (LBS.PER STRAND)	41,300
APPLIED PRESTRESS (LBS.PER STRAND)	30,980

B-2963 PROJECT NO.\_ DURHAM COUNTY 24+92.50 -L-STATION:\_

> STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE 3'-0" X 1'-9" PRESTRESSED CORED SLAB UNIT

REVISIONS					SHEET NO.
BY:	DATE:	NO.	BY:	DATE:	S-15
		3			TOTAL SHEETS
		4			32